GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:3687
ANSWERED ON:16.08.2000
MODERN TECHNIQUE FOR IRRIGATION
CHINMAYANAND;RAMJI LAL SUMAN;SUSHIL KUMAR INDORA

Will the Minister of AGRICULTURE be pleased to state:

(a) whether the Agricultural Scientists have developed a modern technique for irrigation in view of shortage of water;

(b) if so, the details thereof, alongwith the benefits likely to be achieved therefrom;

(c) whether an action plan has been formulated by the Government to encourage new research and innovations in this regard; and

(d) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. DEBENDRA PRADHAN)

(a) Yes, Sir.

(b) The modern techniques are called `Micro Irrigation Systems` and include `Drip` and `Micro-Sprinkler Irrigation` SystemIn these advanced systems, just adequate amount of water is supplied in the form of droplets or microjets near the plant roots to satisfy the plant water requirements. Soluble fertilizers can also be applied alongwith the water and then the system is called `fertigation`. The major benefits of the system include water savings, enhanced plant growth and yields, saving in labour and energy, improved fertilizer use efficiency and suitability for poor and undulating soils and saline water use. Studies, demonstrations and case studies have revealed that the water saving by drip is significant, ranging from 40 to 70% over surface irrigation with a yield increase of as high as 40 to 100%. Presently, about 2,93,016 hactare area is under micro irrigation in India.

(c) Yes, Sir. A number of steps have been taken to promote new research and innovations in the field of micro irrigation.

(d) Following are some of the important initiatives:

1. A `Centre of Excellence on Micro Irrigation` has been established at Directorate of Water Management Research, Patna to conduct lead research and develop human resources.

2. More than 10 ad-hoc research schemes on various aspects of micro irrigation have been financed through Agricultural Produce Cess Fund.

3. An Indo-Israeli Collaborative Project on Micro Irrigation and Protected Agriculture has been established at Indian Agricultural Research Institute, New Delhi.

4. Several Indian scientists have been trained in Israel and other advanced countries in this field so as to conduct innovative research on micro irrigation.

5. Ministry of Water Resources through Indian National Committee on Irrigation and Drainage has planned to confer `Sukshma Sinchai Purskar` to scientists/farmers for improvement and innovation in the design and practice of various components of Micro Irrigation.